

What is claimed is:

1. A driver circuit for driving an electro-optical device,

wherein the electro-optical device comprises:

5 a plurality of scanning lines;

a plurality of signal lines, each of the signal lines transmitting a multiplexed data signal for first to third color components;

a plurality of pixels, each of the pixels being connected with one of the scanning lines and one of the signal lines; and

10 a plurality of demultiplexers, each of the demultiplexers including first to third demultiplex switching elements which are respectively switch-controlled based on first to third demultiplex control signals, one end of each of the first to third demultiplex switching elements being connected with one of the signal lines and the other end of each of the first to third demultiplex switching elements being connected with one of the pixels

15 for a  $j$ -th color component ( $1 \leq j \leq 3$ ,  $j$  is an integer),

wherein the driver circuit comprises a gate signal generation circuit which outputs a gate signal to each of the scanning lines, the gate signal corresponding to shift output obtained by shifting a start pulse signal, and

20 wherein the gate signal generation circuit comprises a start pulse signal generation circuit which generates the start pulse signal on condition that at least two of the first to third demultiplex control signals go active at the same time.

2. The driver circuit as defined in claim 1,

25 wherein, when the data signal is written in each of the pixels in a first frame and then written in each of the pixels in a second frame after the first frame, the start pulse signal generation circuit generates the start pulse signal on condition that at least two of the first to third demultiplex control signals go active at the same time in a blanking

period provided between a vertical scanning period in the first frame and a vertical scanning period in the second frame.

3. The driver circuit as defined in claim 1,

5        wherein, when the first, second and third demultiplex control signals go active in this order in a period in which all of the pixels for the first to third color components are selected at the same time, the start pulse signal generation circuit generates the start pulse signal on condition that the second and third demultiplex control signals go active at the same time.

10       4. The driver circuit as defined in claim 2,

       wherein, when the first, second and third demultiplex control signals go active in this order in a period in which all of the pixels for the first to third color components are selected at the same time, the start pulse signal generation circuit generates the start pulse  
15       signal on condition that the second and third demultiplex control signals go active at the same time.

5. An electro-optical device comprising:

      a plurality of scanning lines;

20       a plurality of signal lines, each of the signal lines transmitting a multiplexed data signal for first to third color components;

      a plurality of pixels, each of the pixels being connected with one of the scanning lines and one of the signal lines; and

      a plurality of demultiplexers, each of the demultiplexers including first to third  
25       demultiplex switching elements which are respectively switch-controlled based on first to third demultiplex control signals, one end of each of the first to third demultiplex switching elements being connected with one of the signal lines and the other end of each

of the first to third demultiplex switching elements being connected with one of the pixels for a j-th color component ( $1 \leq j \leq 3$ , j is an integer); and

a gate signal generation circuit which outputs a gate signal corresponding to shift output obtained by shifting a start pulse signal to each of the scanning lines,

5        wherein the gate signal generation circuit comprises a start pulse signal generation circuit which generates the start pulse signal on condition that at least two of the first to third demultiplex control signals go active at the same time.

6. The electro-optical device as defined in claim 5,

10        wherein, when the data signal is written in each of the pixels in a first frame and then written in each of the pixels in a second frame after the first frame, the start pulse signal generation circuit generates the start pulse signal on condition that at least two of the first to third demultiplex control signals go active at the same time in a blanking period provided between a vertical scanning period in the first frame and a vertical  
15        scanning period in the second frame.

7. The electro-optical device as defined in claim 5,

wherein, when the first, second and third demultiplex control signals go active in this order in a period in which all of the pixels for the first to third color components are  
20        selected at the same time, the start pulse signal generation circuit generates the start pulse signal on condition that the second and third demultiplex control signals go active at the same time.

8. The electro-optical device as defined in claim 6,

25        wherein, when the first, second and third demultiplex control signals go active in this order in a period in which all of the pixels for the first to third color components are selected at the same time, the start pulse signal generation circuit generates the start pulse

signal on condition that the second and third demultiplex control signals go active at the same time.

9. A drive method for driving an electro-optical device,

wherein the electro-optical device comprises:

a plurality of scanning lines;

a plurality of signal lines, each of the signal lines transmitting a multiplexed data signal for first to third color components;

a plurality of pixels, each of the pixels being connected with one of the scanning lines and one of the signal lines; and

a plurality of demultiplexers, each of the demultiplexers including first to third demultiplex switching elements which are respectively switch-controlled based on first to third demultiplex control signals, one end of each of the first to third demultiplex switching elements being connected with one of the signal lines and the other end of each of the first to third demultiplex switching elements being connected with one of the pixels for a j-th color component ( $1 \leq j \leq 3$ , j is an integer), and

wherein the method comprises:

generating a start pulse signal on condition that at least two of the first to third demultiplex control signals go active at the same time; and

outputting a gate signal corresponding to shift output obtained by shifting the start pulse signal to each of the scanning lines.

10. The drive method as defined in claim 9, comprising:

generating the start pulse signal on condition that at least two of the first to third demultiplex control signals go active at the same time in a blanking period provided between a vertical scanning period in a first frame and a vertical scanning period in a second frame, when the data signal is written in each of the pixels in the first frame and

then written in each of the pixels in the second frame after the first frame.

11. The drive method as defined in claim 9, comprising:

5 generating the start pulse signal on condition that the second and third demultiplex control signals go active at the same time, when the first, second and third demultiplex control signals go active in this order in a period in which all of the pixels for the first to third color components are selected at the same time.

12. The drive method as defined in claim 10, comprising:

10 generating the start pulse signal on condition that the second and third demultiplex control signals go active at the same time, when the first, second and third demultiplex control signals go active in this order in a period in which all of the pixels for the first to third color components are selected at the same time.